National Institute of Environmental Health Sciences

Responding to climate change in New York State: The ClimAID integrated assessment for effective climate change adaptation in New York State. Final report

Author(s): No authors listed
Year: 2011
Journal: Annals of The New York Academy of Sciences. 1244: 2-149

Abstract:

Climate change is already beginning to affect New York State, and these impacts are projected to grow. At the same time, the state has the ability to develop adaptation strategies to prepare for and respond to climate risks now and in the future. The ClimAID assessment provides information on climate change impacts and adaptation for eight sectors in New York State: water resources, coastal zones, ecosystems, agriculture, energy, transportation,telecommunications, and public health. Observed climate trends and future climate projections were developed for seven regions across the state. Within each of the sectors, climate risks, vulnerabilities, and adaptation strategies are identified. Integrating themes across all of the sectors are equity and environmental justice and economics.Case studies are used to examine specific vulnerabilities and potential adaptation strategies in each of the eight sectors. These case studies also illustrate the linkages among climate vulnerabilities, risks, and adaptation, and demonstrate specific monitoring needs. Stakeholder participation was critical to the ClimAID assessment process to ensure relevance to decision makers across the state.

Source: http://dx.doi.org/10.1111/j.1749-6632.2011.06331.x

Resource Description

Climate Scenario :

specification of climate scenario (set of assumptions about future states related to climate)

Special Report on Emissions Scenarios (SRES)

Special Report on Emissions Scenarios (SRES) Scenario: SRES A1, SRES A2, SRES B1

Exposure :

weather or climate related pathway by which climate change affects health

Air Pollution, Ecosystem Changes, Extreme Weather Event, Food/Water Quality, Food/Water Security, Food/Water Security, Precipitation, Sea Level Rise, Temperature

Air Pollution: Interaction with Temperature, Ozone, Particulate Matter

Extreme Weather Event: Drought, Flooding, Hurricanes/Cyclones, Landslides

Food/Water Quality: Biotoxin/Algal Bloom, Pathogen, Other Water Quality Issue

Water Quality (other): Water temperatures

Food/Water Security: Agricultural Productivity, Fisheries, Livestock Productivity, Other Marine Productivity

Temperature: Extreme Heat, Fluctuations

Geographic Feature: ☒

resource focuses on specific type of geography

General Geographical Feature

Geographic Location: ☒

resource focuses on specific location

United States

Health Co-Benefit/Co–Harm (Adaption/Mitigation): ☒

specification of beneficial or harmful impacts to health resulting from efforts to reduce or cope with greenhouse gases

A focus of content

Health Impact: ☒

specification of health effect or disease related to climate change exposure

Cardiovascular Effect, Infectious Disease, Morbidity/Mortality, Respiratory Effect

Infectious Disease: Vectorborne Disease

Vectorborne Disease: Mosquito-borne Disease, Tick-borne Disease

Mosquito-borne Disease: General Mosquito-borne Disease, West Nile Virus

Tick-borne Disease: General Tick-borne Disease

Respiratory Effect: Asthma, Upper Respiratory Allergy

Intervention: ☒

strategy to prepare for or reduce the impact of climate change on health

A focus of content

Mitigation/Adaptation: ☒

mitigation or adaptation strategy is a focus of resource

Adaptation, Mitigation

Model/Methodology: ☒

type of model used or methodology development is a focus of resource

Cost/Economic, Exposure Change Prediction

Population of Concern: A focus of content

Population of Concern: ☑

populations at particular risk or vulnerability to climate change impacts

Elderly, Low Socioeconomic Status, Workers

Other Vulnerable Population: Disabled; Health-compromised; Lack of access to education

Resource Type: ☑

format or standard characteristic of resource

Policy/Opinion

Resilience: ☑

capacity of an individual, community, or institution to dynamically and effectively respond or adapt to shifting climate impact circumstances while continuing to function

A focus of content

Timescale: ☑

time period studied

Long-Term (>50 years)

Vulnerability/Impact Assessment: ☑

resource focus on process of identifying, quantifying, and prioritizing vulnerabilities in a system

A focus of content